UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,528	09/29/2003	Lixiao Wang	S63.2-6533-US04	1834

490 7590 02/20/2009

VIDAS, ARRETT & STEINKRAUS, P.A.
SUITE 400, 6640 SHADY OAK ROAD
EDEN PRAIRIE, MN 55344

EXAMINER	
MATTHEWS, WILLIAM H	

ART UNIT	PAPER NUMBER
3774	

MAIL DATE	DELIVERY MODE
02/20/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/673,528	WANG, LIXIAO	
	Examiner	Art Unit	
	William H. Matthews (Howie)	3774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 November 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 91-108* is/are pending in the application.

4a) Of the above claim(s) *102-104* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 91-101 and 105-108* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 11-25-08 with respect to claims 1,91-101 have been considered but are not persuasive. Applicant argues membrane 64 extends across the middle portion of the stent. However, as stated in the previous office action, Examiner considers the mixture of layers 64,65 as the biocompatible coating which is structurally different from the membrane 64 extending across the middle region. Therefore, the ends comprise a biocompatible coating 64,65 which is not present on the middle region.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1,91-92,94-96,98-101,108 are rejected under 35 U.S.C. 102(e) as being anticipated by Nolting et al. US PN 6,488,701.

4. Nolting disclose in figures 8-9 balloon expandable stents comprising a first end portion having at least one metal surface comprising a coating 64,65 which is not present on the middle portion. The coating is described to include a polymer or drug and may have a radiopaque marker loaded therein meeting the limitations of claims

91,94. Each of the materials 64,65 may dissolve in each other to form a homeogenous unitary coating layer (i.e. the biocompatible coating as claimed) which is structurally different from the membrane 64 present in the middle region. Membrane 64 may be disposed only on either the luminal or vascular surface (column 5 lines 45-46) such that the opposite surface of the metal stent is free of any biocompatible material. Regarding claims 98-99, the ends of the stent are inherently more flexible or looser than the middle of the stent because the curves on the end of the stent are not attached to adjacent curved portions.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 93 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nolting US PN 6,488,701 as applied to claims 1,90-92,94-96,98-101 above, and further in view of Ding et al. US PN 6620194.

7. Nolting meets the limitations of claim 93 as described above, but lack the express written disclosure of the coating including plural layers of the same coating material. Ding et al teaches at c7:22-34 and c15:20-43 an expandable stent comprising multiple coating layers in which the coating material may be the same in order to ensure biocompatibility.

8. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the stent disclosed by Nolting '701 to include plural layers of the similar coating materials, as taught by Dang et al. '194, in order to ensure biocompatibility.

9. Claim 97 and 105-107 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nolting US PN 6,488,701 as applied to claims 1,91-92,94-96,98-101, and 108 above, and further in view of Jang US PUB 2004/0106985.

10. Nolting meet the limitations of claims 97 and 105-107 as described above, but lack the express written disclosure of the coating including a RGD peptide containing compound, Tranilast, Tropidil, or Probucol. Jang teaches at paragraphs [0344-0346] an expandable stent comprising therapeutic compounds which may include anti proliferative agents, inhibitors of vasoactive mechanisms inflammatory actions, or RGD peptide containing compounds in order to promote endothelialization. Tranilast, Tropidil, and Probucol are known therapeutic inhibitors or anti-proliferative agents in the art.

11. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the stent disclosed by Nolting '701 to include RGD peptide containing compounds, Tranilast, Tropidil, or Probucol, as taught by Jang '985, in order to promote endothelialization.

Conclusion

All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Matthews (Howie) whose telephone number is 571-272-4753. The examiner can normally be reached on Monday-Friday 10-6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Isabella can be reached on 571-272-4749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William H. Matthews/
Primary Examiner
Art Unit 3774